



Education Networks of America

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VIA ELECTRONIC FILING

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: Modernizing the E-Rate Program for Schools and Libraries, DA 14-308, WC Docket No. 13-184

Dear Ms. Dortch:

ENA thanks the Commission for allowing additional comments on the E-Rate Modernization process. We have previously submitted very extensive comments to the NPRM and will provide limited comments focused on our most important issues in this document.

General Comments

ENA agrees with the Commission comments that some level of funding for specific products and services delivering Wi-Fi capability inside the school and library is needed to ensure end-to-end connectivity. We encourage the Commission to allow applicants to choose between purchase of equipment or service to accomplish the goals of internal Wi-Fi connectivity without restriction on means to accomplish the end result. A managed service that aggregates certain services “in the cloud” or virtualizes the hardware necessary may be the most cost effective way for certain school systems to purchase Wi-Fi and should be allowed to compete with other available options on a total cost of ownership basis.

ENA continues to stress the need for streamlining the administrative process of E-Rate and have included our summary recommendations in this area as part of this filing. The delays between application submission and E-Rate funds getting to work to provide needed service is a major challenge for recipients and service providers alike and needs to be addressed to meet the aggressive goals of the Commission.

ENA encourages the Commission to implement only certain simple, powerful reforms the first year and plan to perform annual analysis of results to reach a continuous improvement process. As you know, it is critical to carefully evaluate the local budget impact of removing currently supported services. Removing them will potentially result in unintended consequences on investment in broadband expansion because recipients who do not have the budget to absorb the currently supported service costs will most likely shift budget from broadband investment to support these services as described in Item 3.

ENA further believes, similar to the USAC Board, that the FCC should consider creating a group of applicants, service providers and consultants who can act as an ongoing sounding board to FCC E-Rate activities including this modernization effort.

Specific Comments

1. Response to Paragraphs 26, 27 and 29 - The Public Notice appears to consider owned fiber as a stand-alone technology choice when in fact it should be compared to all other options over consistent time horizons to determine the most cost effective solution. While owned fiber may have a lower cost to operate after repayment of a large upfront cost, lit fiber from service providers is also likely to be significantly lower in cost over a similar period of time, such as 15 years for owned fiber versus traditional one to five year time horizons associated with lit fiber. Program history shows that cost per unit has dropped tremendously over the past 15 years so the Commission should consider that information when comparing owned fiber versus other vendor provided technologies as part of this proceeding.
 - a. ENA does not disagree with the value provided through dark fiber, however total cost must be considered against other available services.
 - b. The metric that is typically missing when comparing dark fiber with lit fiber is that the comparison tends to be a blended cost of dark fiber over a long horizon with an assumption that today's cost for lit fiber will continue over the same horizon. We are typically seeing pretty dramatic rate differences for lit fiber when requesting quotes for 5 years versus 3 years and would be even more dramatic when we allow vendors for lit fiber to amortize their costs over 10 years as well. The proof of this is the overall reduction in cost per mb for all bandwidth modes over the last 15 years. In 10 years, we are likely to be purchasing 10 Gbps and 40 Gbps for schools for the same price that we purchase 100 Mbps and 1 Gbps today. This may not trend to all specific situations, but we are missing an opportunity if we don't allow lit and dark fiber to compete.
 - c. Recommendation - Replace mandates for owned fiber with mandates for long-term cost evaluations of all technologies (at a minimum dark versus lit fiber) using same time horizons.
2. Response to Paragraph 35 - The Public Notice (as well as numerous public speeches) is touting the use of consortia purchasing as a way to expand broadband service and reduce costs. ENA agrees that the consortia approach to purchase equipment, or other items that are not location specific, can generate volume-based cost savings. ENA has been involved in numerous statewide and regional last mile broadband consortia. We agree with the Commission's assertion that bulk buying of last mile broadband is not as effective as purchase of equipment using similar techniques. Last mile broadband consortia could be more cost effective or they could just be a blend where the high cost areas pay less and the easy to serve areas pay more to offset (a postalized rate is a popular concept).
 - a. ENA participates as a service provider for several consortia and we agree that, executed properly, consortia can add value and extend service in an equitable manner.

- b. Aggregating buying power at a state or consortia level with an award to a single, monolithic carrier because of its perceived coverage of the membership potentially eliminates involvement of many end users in the procurement process who may become dependent on the consortia, which may or may not proactively look for better and more cost effective solutions. Ultimately there is no one size fits all.
 - c. In addition, considering consortium purchasing as a panacea for better pricing tends to eliminate smaller local entities with specific fiber footprints from participating, and therefore actually can increase cost or reduce fiber service availability in some areas. The current system, while flawed in some respects, allows the local applicant to decide whether consortia or local vendors provide the most cost effective service and we believe the decision should remain at that level and be subject to reasonable price constraints as detailed below in (c).
 - d. The most cost effective guidelines for awards to Form 470 filings in place today are adequate to effectively consider both cost and quality of solutions – regardless of the purchasing method. As an overlay, the E-Rate program can review cost per unit of solutions to determine if cost requested (no matter the purchasing method) is reasonable. By looking at cost irrespective of purchasing method, high dollar outliers can be revealed and helped to find lower costs. That is really the simplest measurement to triage E-Rate funding requests and can speed up approval of the lower to medium cost applications while allowing further evaluation of higher cost requests. The data now collected on Block 5 should help make that simple calculation possible for broadband.
 - e. The Commission has discussed and requested further comments on whether consortia should receive incentives such as higher discount rates. We discourage any such preferences to any one purchasing method to the detriment of other methods. If the consortium method is truly cost effective and provides more total value to the applicant, no additional incentives will be needed for applicants to choose to be part of the consortium. In addition, if such incentives were adopted, how would consortia be managed as currently a “consortium” consists of any number of applicants banding together with no minimum. If an incentive system was adopted, it would likely lead to many new “consortia” being formed of small sizes to qualify for the incentive.
 - i. If an incentive is allowed, the Commission will need to make certain that applicants who file their own 471s based on consortium 470s/procurements are afforded the additional consortia incentive.
 - f. Recommendation - Replace preference for consortia or any specific type of buying vehicle with emphasis on total cost effectiveness and actual cost per unit regardless of purchasing vehicle – approve low to medium cost with limited review and focus review efforts on understanding and reducing high cost applications/areas. Allow locals to continue to make decisions on whether consortia or local vendor options are most cost effective. Do not provide a higher discount rate or other preference to consortia to the detriment of other cost effective purchasing methods.
3. Response to Paragraphs 41 – 46 - ENA understands the focus of the Public Notice to position more dollars to deliver broadband connectivity. However, ENA is concerned about the methods

to try to get there. The elimination of voice service eligibility would increase the amount of dollars available for E-Rate to **match** local applicant funds to purchase broadband. However, barring school districts and libraries stopping use of voice services, which we see as highly unlikely, the removal of matching dollars from voice creates a need for more local funds to buy required voice services. Because the applicants will use more local dollars than before for voice, they will have less local dollars to use to apply to broadband – no matter what the size of the E-Rate fund matching pool.

- a. Given that E-Rate currently allows entities to file for as much bandwidth as they need, why are applicants not filing for those levels of E-Rate. We believe the answer has at least three components:
 - i. Not enough local funds in general
 - ii. Not enough local funds to buy devices
 - iii. Not enough local funds to buy internal connections
 - iv. Even if E-Rate had infinite matching funds, if there are not enough local funds, the E-Rate funding will not be used
- b. Elimination of voice service funding will create more available E-Rate dollars but potentially decrease the amount of broadband implemented
 - i. Simple math – assuming that America's schools continue to need and pay for the level of voice service in place today
 - ii. If a school district is currently spending \$1,000 on voice and paying 30% after E-Rate, their cost is \$300
 - iii. If they need to keep the voice service and E-Rate stops supporting voice service, their local cost becomes \$1,000
 - iv. At the starting point of the process, the technology budget has gone down by \$700
 - v. Unless they have something else that they were paying 100% for that is now E-rate funded (like perhaps Wireless), how do they pay the local match to take advantage of the additional E-Rate funds available for broadband?
- c. The FCC needs to look at the impact to local budgets as part of their efforts to understand the impact of their moves. It is good to create more E-Rate dollars. It is counterproductive to create more E-Rate dollars if the local match is not available.
- d. Recommendation - Replace concept of "increasing the fund size" with increasing the dollars available for local technology use (local budget focus). Increasing E-Rate or moving E-Rate eligibility around without evaluating local impact will not create the big impact desired. Elimination of voice services may create less not more broadband spending due to the need to use local dollars to pay for the previous E-Rate match on voice service.

Respectfully submitted,



Rex Miller

Senior Vice-President and Chief Financial Officer